IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

		Art Unit:	2151
Applicant:			
Application No.:	10/064,176	Examiner	Karen C. Tang
Filed:	June 19, 2002		
Title:	METHOD AND SYSTEM FOR RESOLVING UNIVERSAL RESOURCE LOCATORS (URLS) FROM SCRIPT CODE		

Commissioner for Patents
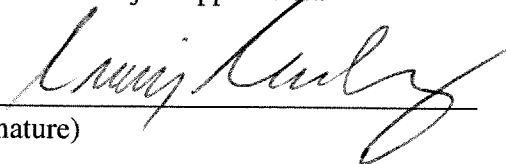P.O. Box 1450
Alexandria, VA 22313-1450

<u>DECLARATION UNDER 37 C.F.R. §1.132 OF CRAIG CONBOY</u>

Sir,

1. I am Craig Conboy, Director of Development at Watchfire Corporation in Ottawa Ontario.

2. I have been involved in the design and production of commercial enterprise software for more than 10 years at several different technology companies in Canada and Australia. My curriculum vitae, containing a more detailed description of my education and software development background, is attached.

3. I am familiar with the invention described in United States Patent Application No. 10/064,176, entitled "Method and system for resolving universal resource locators (URLs) from script code" (the "subject application").

4. I have reviewed the Office Action response dated August 24, 2006. I understand that the Examiner has alleged and maintains that the invention as claimed is obvious with reference to Stern et al (US 2002/0052928) ("Stern") in view of Kraft et al (US 2002/0147637) ("Kraft") in further view of Garcia-Chiesa (US 2002/0099723) ("Garcia-Chiesa") and with reference to Stern et al (US 2002/0052928) ("Stern") in view of Kraft et al (US 2002/0147637) ("Kraft") in further view of Meyerzon (US 6,424,966).

5. The invention described in the subject application is a web crawler that is able to crawl websites that include URLs that are created using script code. In order to do this successfully, the crawler must completely and accurately resolve URLs created using script code. The script code that creates URLs is written to be executed in the web browser and can be complex.

6. Stern describes a web crawler that is unable to crawl websites that create URLs using script code of any complexity. Stern recognizes that it is not straightforward to extract links from the script (refer to para. 0115). A procedure for discovering script URLs based on lexical analysis is described. Watchfire has used a similar approach to resolving script URLs (since around 1998) to the one described in Stern. We found this approach to be inadequate in production because it failed to consistently resolve URLs contained in script and because it incorrectly resolved URLs. Since both completeness (resolving all URLs) and accuracy (incorrectly resolved URLs) are essential to our business, we were motivated to invent a superior technique for resolving script URLs from script.

7. We realized that static analysis of the script (as in Stern) could never guarantee accurate results or completeness. We also realized that in order to resolve script URLs completely and accurately, it would be necessary to use a script URL resolution component that comprises the steps of:

   1) selecting the script code likely to produce a URL
   2) loading the web page
   3) and executing these portions of the script code in the loaded web page to resolve the URL

8. These are three legs of a stool. It is important to select the script code likely to produce a URL in order to be accurate and efficient. It is important to load the web page so that data contained within the web page is available to the script when it is executed (see paras. 0040 to 0042 of the subject application). It is important to execute the script code in the context of the loaded web page in order to resolve the URLs.

9. The system described in Kraft (see para 070) discusses executing script in order to resolve URLs, but does not discuss loading the web page. Executing the script without loading the web page would work for some simple scripts, such as the one presented in Kraft starting at para. 0071. However, website authors are not constrained to keeping their scripts this simple. If one were to use the system described by Kraft to resolve many more complex scripts, either execution of the script would fail; the system would fail to resolve a URL normally produced by the script; or the system would incorrectly produce a false URL not generated by the script when it is executed in its correct context.

10. Our realization that script code must be executed in the loaded web page in order to accurately and completely resolve the URLs generated by the script was a significant inventive step beyond Stern and Kraft.

11. The system described by Garcia-Chiesa concerns a different problem domain and is unrelated to the field of our invention. Garcia-Chiesa is specifically concerned with allowing a web crawler application to overcome the problems created through the dynamic creation of URLs on Lotus Notes Domino web server. The

subject application, on the other hand, is concerned with allowing a web crawler application to resolve script URLs created by scripts embedded on a webpage running in a web browser. As a result, the approach described in Garcia-Chiesa is not compatible with the approaches described in Stern and Kraft and, as such, it would not be obvious to combine them together. Furthermore, such a combination would not result in the approach described in the subject application.

_____
(Signature)

Craig Conboy_____
(Print or type Name)

26 Feb, 2007
_____
(Date)

Craig Conboy

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Objective   To create innovative, useful, commercially successful products.

Technical Skills   .Net, Java, C, C++, C#, VB, COM, DCOM, J2EE, Servlets, JSP, ASP, ASP.Net, XML, XSL, DHTML, CSS, Multithreading, OO Design, Development Process, Distributed Applications, Enterprise Application Development, Web Application Security.

Employment

Director, Development   Dec 2005 to present

Watchfire, Ottawa, Canada
Lead a software development organization delivering products that generate 20M revenue annually. Improved development and quality assurance effectiveness, refined processes, multiple achievements around distributed development, outsourcing, and patents.

Manager, Server Development   May 2004 to Dec 2005

Watchfire, Ottawa, Canada
Managed a team of software developers responsible for delivering server technologies for an enterprise-class software product.

Software Architect   February 2002 to May 2004

Watchfire, Ottawa, Canada
Designed enterprise system based on web services technology. Identified design patterns and a development framework that were used by a team of six developers to create the product. Reviewed developer's code and designs to ensure quality and consistency. Evaluated third-party technologies in order to provide strategic recommendations to executive.

Technical Lead, Web Applications   January 2001 to February 2002

Watchfire, Ottawa, Canada
Design, implementation, and technical oversight of web interface for new enterprise-class application. Assembled and mentored a team of seven developers to deliver our portion of the product. Shared in management responsibility including division of work, task assignment and scheduling.

Manager, EIP Core   May 2000 to January 2001

Hummingbird, Ottawa, Canada
Development manager responsible for enterprise product. The role included direct involvement in project management, performance management, architecture, development, process establishment, communications, and training. Starting with a team of four built a strong development team of twelve. Led the team through the delivery of three product releases.

Developer   June 1999 to April 2000

Hummingbird, Ottawa, Canada
Member of five person team building a 1.0 product, which was implemented using Java Servlets and an XML-based distributed server architecture. Developed technology to provide unified navigation and search across multiple applications, for which patent applications where filed.

Craig Conboy

Senior Product Engineer, South Asia March 1998 to June 1999
PC DOCS Group Pty. Ltd., Sydney,
Australia

Consultation with clients, customer education, pre-sales presentations, custom development work, support, project management. Worked on major accounts in Australia, New Zealand, and Singapore. Supported customers in Kuala Lumpur, India, Korea, Hong Kong, and New Caledonia. Built prototype Medex medical portal using PC DOCS technology. (PC DOCS acquired by Hummingbird)

Developer June 1996 to February 1998
Fulcrum Technologies Inc., Ottawa,
Canada

Lead developer on a complex intranet product, which uses Active Server Pages, client-side JavaScript and an underlying database. Experience with HTML, DHTML, XML, CSS, and browser capabilities. COM component development using Java, VB, C++ (ATL and MFC). Designed a server DLL to do streamed conversion of documents into HTML. (Fulcrum acquired by PC DOCS)

Product Verification Consultant May 1995 to May 1996
Fulcrum Technologies Inc., Ottawa,
Canada

Developed an automated test suite using Visual Test for a browser-based application. Designed a robust and exhaustive automated test harness for an OCX custom control using Visual Basic.

I have also worked as a Schoolnet Support Teacher, a Teacher, and as a Wilderness Skills Program Coordinator.

Education and Conferences

Bachelor of Education, Computer Science and Physics 1994 – 1995
Queen's University, Kingston, Canada
Bachelor of Science, Honours, Physics 1990 – 1994
Queen's University, Kingston, Canada

Leadership Program, Queen's Executive Development Centre September 2004
Queen's University, Kingston, Canada
RSA Conference February 2003
San Francisco, California, USA
JavaOne September 2001
San Francisco, California, USA
Microsoft Professional Developer's Conference October 1998
Denver, Colorado, USA
Microsoft Professional Developer's Conference September 1997
San Diego, California, USA
Microsoft Professional Developer's Conference November 1996
Long Beach, California, USA

References available upon request.